# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

Amendment of Parts 2 and 15 of the
Commission's Rules to Deregulate the
Equipment Authorization Requirements
for Digital Devices

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To: The Commission

#### COMMENTS OF HEWLETT-PACKARD COMPANY

Hewlett-Packard Company ("HP"), hereby submits these comments in response to the Commission's Notice of Proposed Rule Making ("NPRM"), ET Docket No. 95-19, released February 7, 1995.

HP is a manufacturer of measurement, computation and communications devices and systems. HP's products and services are used in industrial, business, engineering, scientific, medical, educational and domestic settings in 120 countries around the world.

#### **SUMMARY**

HP supports the concepts underlying the Commission's proposals, but recommends several specific changes to the proposals concerning the Supplier's Declaration of Conformity ("DoC"):

- A: The Commission should substitute the DoC program not only for equipment now subject to certification, but also for equipment subject to verification requirements. Eliminating this distinction would further harmonize compliance procedures in the USA and European Union.
- B: The proposed compliance labeling program should use logos that are suitable for multinational use. Such logos would avoid duplicative labeling as more and more countries, including the USA, adopt CISPR standards for emissions.
- C: HP strongly opposes adoption of NVLAP requirements at this time. The Commission should retain its existing simple test site registration process until data collected through marketplace audits

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under the new DoC program demonstrates the need for further accreditation.

HP also recommends the following change to the Commission's proposal concerning authorization of modular components:

D: PC's assembled at retail outlets from pre-tested components should not be labeled to claim full conformity with Part 15. Because assembly of pre-tested parts will not always result in a system that meets the limits specified in Part 15, the label should only state that the product was assembled from parts as allowed by Part 15. Full compliance statements should be reserved for those manufacturers and assemblers who run complete systems tests.

HP supports the Commission's proposal to reallocate some of its resources to increased marketplace sampling and testing. A well-designed plan for auditing test reports, products and modular components, and for analyzing the results of these audits will allow the Commission to better assess the effectiveness of Part 15 implementation and the necessity of further measures.

Lastly, in order to accelerate the adoption of at least one of the proposals in the NPRM, the Commission should consider bifurcating the rulemaking process for DoC's from that for modular authorization.

## I. THE SUPPLIER'S DECLARATION OF CONFORMITY WILL EASE TRADE AND REDUCE COST WITHOUT AN INCREASE IN HARMFUL EMISSIONS

The adoption in many countries of international standards for EMI limits and test methods, and the subsequent adoption of a Supplier's Declaration of Conformity in place of country-unique administrative processes, reduces the cost of bringing new products to market and speeds up the rate at which globally competitive products can be introduced. Suppression of harmful emissions from products results more from solid design and manufacturing process control than from the act of qualification testing. Because the substitution of DoC's for the need to wait for FCC certification will allow accelerated product introduction, manufacturers will place a premium on designing and building compliant products: only non-compliant products will face marketing delays.

The proposed elements of the DoC generally follow those outlined in ISO Guide 22, making it possible for a single declaration page to show compliance in several different countries. The Commission's proposal to include a test report identifier provides further assurance to both the product purchaser and authorities that the product in question meets the standard. A common technical standard and a single declaration that allows access to multiple markets, each of which has specific enforcement powers, is a strong incentive to manufacturers to ensure that their products do meet the requirements. Failure to do so would virtually ensure that the product could not be sold legally sold in the major markets of the world.

Coupled with the Declaration to be provided with each product, the Commission has proposed a change in the labeling placed on the product itself. As the Commission's Rules allow technical compliance with either the 3 meter/10 meter limits specified in the Rules or those published in CISPR 22, any "logo" on the product should specify with which limits the product complies. In order to prevent a profusion of national compliance logos and to encourage harmonized standards abroad, the Commission should not adopt a logo that is USA-specific or otherwise unsuitable for acceptance by other countries. Compliant equipment should simply be marked with one of four simple statements:

- FCC Part 15 Class A
- FCC Part 15 Class B
- CISPR 22 A
- CISPR 22 B

This system would allow fast identification of the product compliance limits. In the case of an international product, the use of the CISPR reference would open the door to reducing the number of unique markings required by some other countries.

Lastly, the DoC program should not be limited to personal computers and personal computer peripherals. Two of the United States' major trading partners, Europe and Japan, do not use different administrative processes based on a product's emission level or use location. The Commission should consider adopting this uniform approach by extending the proposed DoC to products currently subject to the FCC verification process.

### II. TEST FACILITY ACCREDITATION IS NOT NECESSARY

HP strongly objects to the Commission's proposal to require formal laboratory accreditation as a condition for use of the Supplier's Declaration of Conformity. The resultant costs of requiring a lab accreditation program such as NVLAP probably exceed the benefits by a fair margin. Instead, HP recommends that the Commission retain the existing test lab registration process, which, when coupled with a new marketplace audit program, will allow study of conformity issues and a root-cause analysis, so that effective corrective action can be developed if needed.

Requiring lab accreditation would make the USA the only large trading nation with a government mandate for laboratory accreditation associated with EMI testing. Second, there is no evidence that such accreditation would lead to a greater level of compliance with Part 15 limits than the present simple FCC site registration process. HP's experience suggests that the design of the product and subsequent management of the manufacturing process have much more impact on continued compliance than would formal accreditation of the qualification test lab.

Rather than increase operating costs and possibly put USA exporters at a global competitive disadvantage, HP recommends the Commission retain the present test lab registration process during the transition to the Supplier's

Declaration of Conformity. The Commission may revisit the need for test lab accreditation if its proposed marketplace audit program shows that the lack of a lab qualification requirement is a major source of interfering and otherwise non-conforming products. HP believes that if the Commission finds that test lab accreditation is needed to achieve conformity, then a global accreditation scheme, rather than a national one, should be developed or adopted. Only such a global accreditation system would encourage a large number of labs throughout the world to seek accreditation.

### III. THE MODULAR COMPUTER COMPONENT AUTHORIZATION PROGRAM SHOULD BE ADOPTED

HP has considerable experience in integrating components, sub-assemblies and products into complete systems. This experience has required substantial investment in design, specification, test facilities and expert personnel, HP has learned that system compliance is more than the simple sum of the parts. Nevertheless, the Commission's proposal for retail-channel PC assembly has merit because it would increase the likelihood of product compliance (or at least of lower emissions) than would otherwise exist.

In order to increase the chance of assembling a system that complies with Part 15 emission limits, systems assemblers will need Declarations of Conformity from component vendors that provide certain specific information. For a CPU motherboard, this information should include the frequency and field strength of the bare board emissions, as well as the prospective enclosure attenuation performance as a function of frequency. This information, as well as a reference to the test report showing that the component was tested in several typical systems configurations, should be part of the component declaration.

The DoC and product marking for a system assembled from authorized components should not indicate that the computer complies with Part 15, as that may not be the case. They should only state, "This product was assembled from components as permitted by Part 15." Only those systems that are type-tested or otherwise evaluated according to the Part 15 rules should claim conformity on their DoC.

As the Commission's modular authorization proposal is based the unproven assumption that systems emissions will meet Part 15 limits based on simple subassembly tests, the Commission should carefully design its marketplace auditing program to collect data useful for evaluating the relative effectiveness of this novel approach for avoiding harmful interference.

With respect to international sales, the Commission's modular proposal is inconsistent with other nations' system-level testing requirements. This inconsistency may present a limited problem for some US retailers who are also exporters, and who may neglect to conduct full systems qualifications testing before shipping to other countries.

### **CONCLUSION**

HP commends the Commission for taking bold steps in moving to a Declaration of Conformity process and in pioneering a solution to controlling emissions from computers assembled in the distribution/retail channels from OEM subassemblies. HP urges an expeditious adoption of the newly proposed programs.

Respectfully submitted,

**HEWLETT-PACKARD COMPANY** 

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